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ALBERTA PUBLIC SAFETY SERVICES

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AGENCY INSIGHT

Industry and the Community

Industry and the community

Ever since Mississauga and Bhopal became something more than geographic place names, industry has looked increasingly over its fences to the surrounding community.

This changing outlook was prompted in part by the horrific realization of what might have been in 1979, when a train pulling chlorine tankers derailed and caught fire in Mississauga, Ontario forcing the evacuation of more than 200,000 people. The Bhopal disaster drove the point home when the unthinkable did happen and a toxic gas release killed more than 3,000 people and injured tens of thousands more in India.

Today, spurred on by these incidents, industry is assuming an increasing responsibility in emergency preparedness and response planning with its neighbors.

This issue of *Insight* discusses some of the areas where industry is working as a partner with government and local authorities to prevent and mitigate major industrial accidents. A prime example lies in the Major Industrial Accidents Co-ordinating Committee (MIACC), a voluntary body set up in 1987 with representatives from federal, provincial and municipal agencies, industry associations, emergency response organizations and the academic community.

These stakeholders are co-operating and sharing expertise to draw up guidelines to reduce the chance of a Bhopal-type disaster occurring in Canada. Details about MIACC's latest efforts are included in the *MIACC News* stapled into the centre of Insight.

Starting on page 4, two articles discuss the main example of industrial leadership in this area, in particular, the much-copied Responsible Care initiative undertaken by The Canadian Chemical Producers' Assocation. Another perspective from industry is provided by Bill McGannon, a corporate risk manager with Nova Corporation, who on page 8 offers his wit and wisdom on how industry can work to prevent losses.

Rich DePatie, Calgary's director of disaster services, provides a municipal point of view on page 10 where he discusses how Calgary works with industry to prevent and be prepared for disasters. From the government side, Bonnie Shulman - an information officer with Alberta Public Safety Services (APSS), writes on page 13 about Ralph Holmes' new job as the agency's first co-ordinator of industrial programs. Ralph himself, on page 14, has contributed a list of training courses where industrial personnel can acquire and maintain response-related skills.

Insight is published quarterly by Alberta Public Safety Services (APSS). The publication aims to inform readers about current developments concerning topics which relate to the mandate of APSS: to prepare for, respond to and follow up on man-made or natural disasters in Alberta. This mandate includes activities in the areas of disaster services and management, as well as the handling, offering and transporting of dangerous goods.

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On the Cover: A safety advisor from Esso Resources Canada Limited discusses the contents of a leaking tanker with a firefighter in Devon. The pair were part of an exercise organized last spring by Esso, Alberta Public Safety Services and the Town of Devon to test emergency response plans. Photo by Pius Rolheiser, courtesy of Esso Resources Canada Limited.

Alberta
PUBLIC SAFETY SERVICES

CANADIANA

MAR 25 1991

The Hon. Ken Kowalski, Minister of Alberta Public Safety Services, addresses guests at the official opening of the Milk River Travel Information and Interpretive Centre.

Industry and government team up

Insight recently spoke with the Hon. Ken Kowalski, Minister of Alberta Public Safety Services.

Mr. Kowalski, this issue of *Insight* is devoted to looking at the way in which industry responds to emergencies effecting the community. Why is this important to you as the Minister responsible for emergency preparedness in Alberta?

Public Safety Services is just what it says. Anything that concerns the safety of Albertans is the concern, and rightfully so, of Alberta Public Safety Services (APSS). While industry is essential to our very existence here in Alberta, we frequently have to accept that it works with toxic substances. It is, therefore, essential that industry, too, should be prepared to deal with any emergency that it may have to face.

Since the law requires that every municipality in Alberta must have a disaster plan that is updated and rehearsed every year, why can't we have a similar law for industry?

That is a good question, and one I have thought about. I certainly have not chosen to ignore the question, but I have decided to approach this potential problem in a rather different way. After the disaster in Bhopal, India in 1984, where more than 3,000 people were killed and tens of thousands injured after exposure to a deadly gas leak, the federal government reviewed the possibility of a similar disaster occurring in Canada. In a study by Environment Canada, which found that the potential existed for a major industrial accident in this country, 21 recommendations were made about how to reduce that possibility severely, and how the results of such an accident could be mitigated. The voluntary body set up to implement these recommendations is called MIACC, which stands for Major Industrial Accidents Co-ordinating Committee. This is the route I want to take in Alberta.

What has MIACC to do with industry in Alberta, and how will this body help ensure the safety of Albertans?

Well, first I should explain that MIACC is typically Canadian. It is a voluntary body set up on a co-operative model, that brings together all the stakeholders to work together: industry, the three orders of government, trade and business associations, the academic community and emergency response organizations. Everyone agrees that it better, much better, to obtain the voluntary agreement of all parties concerned rather than following an entirely regulatory practice, which could result in some very complicated and difficult-to-enforce legislation.

Has anything happened with MIACC as far as Alberta goes?

Yes, progress has been made. We now have a regional MIACC-A, with the A standing for Alberta. Its job is to take the findings from the national working groups in areas such as buffer zones, risk assessment, contingency plans and training standards and adapt them to the Alberta situation. MIACC-A's members, like the national group, include representatives from all the stakeholders who are working together to prevent major industrial accidents.

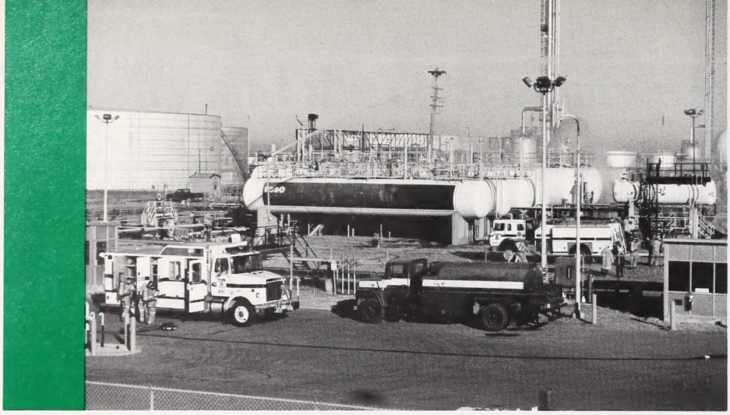
Is APSS providing a leadership role in MIACC and MIACC-A?

Yes, we are. APSS has since the very start been very active in MIACC. Mark Egener, the Managing Director of APSS, is the current Chairman of MIACC and MIACC-A.

Is industry actually working with APSS now?

Yes. More and more frequently, there are representatives from industry at our training school; they are taking an ever increasing role in our courses. They ask us to talk to them, and we provide seminars and workshops on every aspect of emergency preparedness. We are providing key input for a major conference on emergency response — ER '91 — taking place in Calgary next May. At this conference, more than 500 delegates are expected to come from North and South America, Asia and Europe. ER '91 is devoted to the technological response to accidents of dangerous substances.

I am pleased to tell you that the Alberta government considers this conference so important that the Premier will be the Patron of the conference and the Honorary Chairman of the International Advisory Board. Alberta and industry will continue to work together, not only with ER '91, but also within MIACC-A and as far as I can see, well into the future.



GOV'T OF ALBERTA

Responsible Care is a unique initiative by industry aimed at ensuring the safe management of chemicals through all stages of their life cycle.

Responsible Care:

Canada's chemical industry sets a world example

by Cheryl Edwards, Insight Editor

If imitation is the sincerest form of flattery, The Canadian Chemical Producers' Association (CCPA) can consider itself to be flattered indeed. Its innovative Responsible Care initiative promoting the safe management of chemicals has caught world-wide attention.

Major chemical trade associations around the world, including the Chemical Manufacturers' Association in the United States, are adopting policies similar to the CCPA, which requires its members to make "a commitment to the responsible management of chemicals through all aspects of their life cycle, so as to minimize adverse effects on human health and well-being and the environment." Responsible Care is applied through six codes of conduct, or practice, to minimize risk and increase safety in the six main activities of the chemical industry: community awareness and emergency response, research and development, manufacturing, transportation, distribution and hazardous waste management.

"Responsible Care is a unique approach taken by an entire industrial sector to deal with hazardous materials in a comprehensive program, from initial manufacture to final disposal," says Mark Egener, Managing Director of Alberta Public Safety Services. "It should more than satisfy the most rigorous legislative and regulatory approach to dealing with these products. From the point of view of Public Safety Services, we would like all industry sectors which use dangerous goods to adopt a similar mandatory approach."

The #1 issue: environment

Art O'Connor, the CCPA's Vice-president of Public Affairs in Ottawa, says Responsible Care is catching on for a whole variety of reasons. "First and foremost, the environment is quickly becoming the number one issue as far as the public agenda is concerned, and in the eyes of politicians and bureaucrats. I think, too, there has been a gradual awakening on the part of industry that the option is to clean up your own house before someone (government) tells you to do it."

Responsible Care's guiding principles aim to strike a balance between a regulatory and voluntary approach to safety, using a consultative process with all the stakeholders to achieve it. As Mr. O'Connor puts it: "Governments tend to get into telling you how to do it, but they're not specialized in the whys and wherefores of corporate management and technology."

Ironically, if government ever did move to regulate the industry, it would likely use Responsible Care as the model, according to Wayne Bissett, Chief of Prevention for the Environmental Emergencies Branch of Environment Canada. "There's a lot of depth to the programs, and if they are implemented fully, they would have the effect of what we would hope to accomplish through regulation. Responsible Care really is a unique initiative, which provides a new alternative to the traditional regulatory approach of government versus industry." Mr. Bissett's one concern about Responsible Care is accountability. "What we need in government is some assurance that improvements are being made and the program is achieving the results expected."

Today's Responsible Care policy had its beginning in the late 1970s, when a set of guiding principles was developed by CCPA staff and member companies. "As a trade association, we recognized in order to have a meaningful role in developing public policy, we had to be seen as an industry that was strategic or key to the Canadian industrial economic fabric, and one which was operating in a responsible fashion," says Mr. O'Connor.

For a number of years, the guiding principles remained a statement of philosophy, and members were asked to endorse them voluntarily. Then, on Dec. 3, 1984, came Bhopal. In what remains the world's most tragic chemical accident, more than 3,000 people were killed and tens of thousands injured during a toxic gas release in Bhopal, India.

Doing the right thing

That month, the CCPA made signing the guiding principles a condition of membership. In 1985, the CCPA board also recommended that more tangible criteria be developed "by which actions could be undertaken

One of Responsible Care's codes of practice focuses on the safe transportation of chemicals.

GOV'T OF ALBERTA

that were more in keeping with the spirit of the guiding principles," says Mr. O'Connor. "We moved from philosophy to substantive guidelines that form the basis of the codes of practice. The fundamental issue is that industry needs to be seen to be doing the right things, and in order to do that, it has to be doing the right things."

Responsible Care, with its codes of practice, gives CCPA member companies a mechanism to do just that, Mr. O'Connor says. It also creates consistency in environmental, social and corporate performance, and provides good indicators of performance.

Today, two of the codes of practice have gone from the drawing board to the operations of the more than 70 member companies of the CCPA, which represent almost 90 per cent of the value of chemicals produced in the country. The first code, known as CAER (Community Awareness and Emergency Response) was started in 1986 in communities where there are chemical facilities such as plants or warehouses. The second code now in place, for transportation, has been dubbed TransCAER (Transportation Community Awareness and Emergency Response).

The other four codes of practice in chemical manufacturing, distribution, research and development, and hazardous waste management, are in various stages of implementation. All CCPA companies have been asked to achieve the schedule of milestones attached to each code by the end of 1992. In addition, CCPA members were recently asked to "renew their vows" to the Responsible Care policy.

The community level

Of all the codes of practice, CAER and TransCAER are the ones that directly address the industry's responsibilities at the community level. CAER, in particular, and TransCAER to a lesser extent, aim to provide relevant information to the public and to co-operate with local first responders. "CAER and TransCAER help us in the provincial government and also in municipal governments to really come to grips with the planning and response needs of dangerous products," says Mr. Egener. "These two specific programs bring local industry and local governments into close contact in the planning and response needs to promote public safety." (See the accompanying article for more information about these two programs.)

CAER and TransCAER are the expression of Responsible Care's guiding principle that requires CCPA members to "be responsive and sensitive to legitimate community concerns." Responsible Care also includes a community right-to-know policy.

By assuming this kind of responsibility at the local level, the CCPA is hoping to reverse the results of public opinion polls it commissioned when the codes of practice were being planned. Those polls showed that the public does not trust the chemical industry to handle its products safely and is suspicious that information is being kept from it.

The CCPA's work with communities also stems from the recognition of the importance of the grassroots level in any effort to improve safety. As Mr. O'Connor says, "when an incident occurs, it happens at the grassroots level and has to be addressed at the grassroots."

Editor's Note: *The Canadian Petroleum Association has an environmental code of practice and guidelines for community consultation that are similar to Responsible Care in some aspects. The environmental code of practice sets out responsibilities of petroleum companies from the plant commissioning to decommissioning. Unlike Responsible Care, however, these initiatives are voluntary, not mandatory, for member companies.*

The Community Consultation Guideline released last year provides CPA members with an understanding of what is involved in informing communities about emergency planning and project activity that may affect the public. The guidelines describe an issues management process for companies to follow in working with communities. The amount of public consultation and involvement with local first responders depends on such factors as the size of the project, as well as its environmental or social impacts.

"The emphasis is not for the company to go tell the public what to do, but create a dialogue so the company can learn what the issues are from the community, and put together a mechanism to resolve any outstanding problems," says Doug Bruchet, the CPA's Vice-president of Health, Safety and Environment.

The CPA also works with local first responders in preparing co-ordinated emergency response plans for sour gas incidents, plans which are required under provincial law.

Major chemical companies in Canada are working closely with local communities located along major transportation corridors, and with municipalities where there are fixed chemical facilities.

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CAER and TransCAER:
Safety at the grassroots level

by Cheryl Edwards, Insight Editor

Across the country, members of The Canadian Chemical Producers' Association (CCPA) are increasingly working at the grassroots level in their local communities.

The CCPA members have a two-fold mission: to raise public awareness about their operations and chemicals in general, and to work with local first responders to co-ordinate emergency plans. These objectives are made plain in the names of two CCPA programs: CAER, which stands for Community Awareness and Emergency Response, and TransCAER, which promotes the safe transportation of chemicals.

CAER and TransCAER are two of the six codes of conduct under the CCPA's Responsible Care policy which strives for the safe management of chemicals through all stages of their life cycle. These two codes put into action a guiding principle of Responsible Care that requires CCPA members to be sensitive to community concerns.

CAER is a program that was started in 1986 in communities where there are fixed chemical facilities such as plants or warehouses. CCPA members are currently responsible for 250 sites in 145 Canadian communities. To date, 86 per cent of those communities have entered into some aspects of CAER with member companies. Forty per cent of CCPA member companies are in communities where there is an organized committee at the community level to carry out CAER, and 15 per cent of members have undertaken a test of their local emergency response plans with their communities.

Community outreach

Through community outreach programs, CAER works to replace public fears with facts about health, safety and environmental risks associated with the chemicals present at CCPA sites. At NOVA's Joffre plant, for example, the doors were opened to the community last summer for what proved to be popular public tours and a program for special interest groups. A media open house allowed reporters to learn about the plant's operation, process and product. Other parts of the CAER program in Joffre include a quarterly newsletter, information brochures, a local information exchange group and a hotline for handling formal complaints and inquiries.

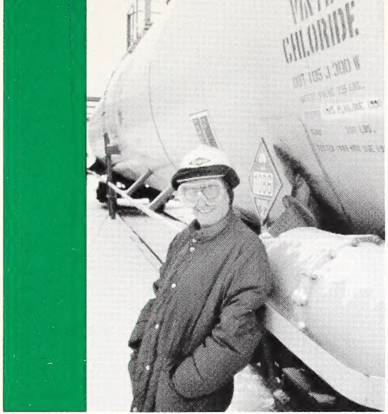
This openness to communicate with the community is a reflection of the Community Right-to-Know Policy of Responsible Care, which "recognizes the need and right of the public to know the risks associated with the operations and products present in or transported through communities."

Through CAER, CCPA member companies also work closely with local authorities to develop, co-ordinate and test emergency response plans. "The key point about all this is that industry wants to take its expertise in being responsible managers and share that and develop that with the communities and the public," says Frank Markson, general manager of the CCPA's Alberta Region and executive director of the Fort Saskatchewan Regional Industrial Association (FSRIA). Mr. Markson also points out that although Responsible Care was started by the CCPA, CAER is open to non-CCPA members as part of the community emergency response planning activity.

Opening doors

When CAER is introduced in a community, it often leads to a synergy created by co-operation among local groups responsible for emergency response. As Dave Worman, Fort Saskatchewan's director of disaster services puts it: "Having CAER and the philosophy of CAER in the community opens doors to ideas and streamlines communications. The idea is already there, so you don't have to spend time selling that theme to get support." Besides helping avoid duplication of efforts, Mr. Worman says that CAER is a good avenue to bring industrial and municipal responsibilities together.

Dave Hodgins, the chief of Strathcona County's award-winning fire department, and assistant director of disaster services, says CAER provides an opportunity to share expertise and knowledge, particularly through simulations that test mutual response plans. These efforts pay off when a real emergency strikes. "For one thing, you already know the people and you know what type of response to expect from each agency, which



DOW CHEMICAL CANADA INC.

Paul Chambers from Dow Chemical Canada Inc. in Fort Saskatchewan has helped launch the TransCAER program in 45 prairie communities.

makes for a more effective and efficient response."

For its part, TransCAER is a kind of CAER on the move. "TransCAER is an extension of the CAER principles down the transportation corridors between our plants and our customers," says Ross Burns, the logistics manager for Novacor Chemicals in Calgary, and a key figure in the development of the transportation code of practice.

Responsible Care's transportation code was approved in late 1987. "I'd like to think that 70 per cent of the code covers the internal things we do in a company to make sure transportation is as safe as possible: how we operate our loading and unloading facilities, how we train our employees, how we document and placard our shipments, and how we go about arranging our emergency response capability," Mr. Burns says. "The other 30 per cent covers the external things we need to do, such as ensuring the use of only safe motor carriers through our Motor Carrier Evaluation Program."

The transportation code includes three key sections: the first covers accident prevention measures such as choosing the safest mode of transport and route for shipping chemicals. The other two sections describe the responsibilities of member companies in providing effective emergency response capabilities in the event of a transportation accident, and in raising awareness concerning transportation safety.

To address this latter section — raising awareness — 19 CCPA companies in the Prairie region have launched a permanent community outreach initiative called Partners in TransCAER. Between them, the companies have adopted 45 communities along major transportation corridors. The companies work separately with four local audiences — government administrators, the media, community groups and first responders — to provide relevant information about the chemicals passing through the community and industry efforts to ensure safety.

More detailed sessions are held for police, fire and ambulance workers, who also receive an information manual. Paul Chambers, the full-time TransCAER project manager for Dow Chemical Canada Inc. in Fort Saskatchewan, says the manual includes pragmatic information, specifically designed for first responders, including the characteristics of chemicals typically transported in the region.

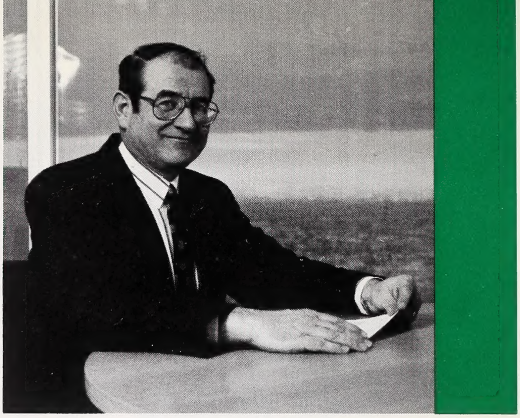
Making decisions

"The manual is intended to help first responders make decisions on how to act in the event of an emergency, even if that decision is to do nothing and seek outside help," says Mr. Chambers. "In those first few hours, they are on their own when it's 2 a.m. and -38 C and they need to know if they should evacuate the local nursing home."

According to Mr. Burns, an eight-hour training program is also being developed by the CCPA and the Canadian Association of Fire Chiefs for first responders along the transportation corridors and should be available some time this year. The program will meet the standards of the National Fire Prevention Association. TransCAER's national committee is also co-operating with the transportation and rail-car manufacturing industries to produce a safety train. The first of its kind in Canada, the train is expected to be in operation later this year to act as a specialized training vehicle for CCPA employees and first responders across the country. It can also be used for public displays to increase people's awareness of safe transportation practices.

Ross Burns, logistics manager for Novacor Chemicals in Calgary, was a key figure in the development of the national transportation code of practice for the The Canadian Chemical Producers' Association.

Viewpoint



Bill McGannon says that any corporation worth its annual profit will narrowly miss three disasters for every $1 million in revenue, and experience a major loss for each $8 billion of aggregated revenue.

McGannon's 6th law of risk management:

Hang on to your spread sheets, statistical wizards, and ask these questions

Viewpoint gives you, the reader, a soapbox to stand on and air your views. Start a debate: send your beefs and bouquets to Viewpoint, in care of Insight's managing editor. Views expressed here do not necessarily reflect those of Alberta Public Safety Services.

by Bill McGannon,
Corporate Risk Manager
Nova Corporation of Alberta

For the many who are regular readers of *Insight,* one theme that dominates the many articles on planning for emergency response is co-operation with your neighbors, sharing and analyzing. The preparation and effort prior to any loss will trigger responses that are precise and correct when the emergency comes.

For those of you who have had to become involved and have been part of the natural turmoil, you have no doubt found that your confidence increases with each decision and your decisions become better. The adrenalin flows, overcoming doubts, and you are in command.

At the opposite pole, I have developed a law, my 6th law of risk management concerning catastrophe, which goes like this: "When a catastrophe befalls the unprepared, the number of important decisions you fail to make will increase exponentially as the pressure from your employer, or regulatory authority or the uninvolved intensifies." And we have all been there and experienced that!

The one thing I have observed, in reading the manuals and voluminous publications on the subject of emergency preparedness, is that we mostly plan and prepare for the emergency in the same way with adjustments here and there for our particular business risks. There are, for the most part, three essential areas that have to be continually explored and revisited.

Firstly, is the monitoring or auditing of the business and the emergency plan we have crafted to that business: Have things changed? Has the change increased or decreased the risk to the business? How will it get worse? Does it get better?

Smart employees

Secondly, have we truly been holistic in our approach; for example, have we tapped *all* of our in-house resources? It is absolutely amazing at how smart our fellow employees are, their baggage of previous experiences, their knowledge of our own business and the things they think about that you have not.

Thirdly, do you have a post-loss or near-miss analysis, and who should be there at the table? All too often, the decision maker assigns a subordinate and this can be a mistake. The worst mistake is not to analyze at all.

What I have found in post-loss analysis is that as the discussion unfolds, unique insights are tabled by those in the front line, especially about their needs and back-up. From this gathering, the rewrite will begin to unfold and the emergency plan takes on a positive sheen because ownership spreads.

Salivate over solutions

We all battle costs, and judicial spending in tough economic and competitive times presents the opportunity to salivate over a solution. The questions often asked are: "Has it ever happened? Can you quantify it? What is the probability? Given these answers, we will invest the cash for all this preparedness and planning."

From an intuitive Wild Ass Guess perspective, and that is left of centre of Scientific Wild Ass Guess, I would say that any corporation worth its annual profit would have three near misses per $1 million of revenue, and two incidents calling upon its emergency response plan in some form per $100 million of revenue. You will probably be faced with a major loss once in $8 billion of aggregated revenue. By a major loss, I am saying one that would represent one per cent of your annual sales revenue or one per cent of your retained earnings and capital, whichever is larger. Lastly, you could be faced with a catastrophic loss once in about 10 years. By that I would say a loss equals 1.5 times your

Scott Bricker was honored at his recent retirement reception for his many contributions to Alberta Public Safety Services.

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annual profit and a catastrophic loss would also include one or more employee injuries or possibly one or more deaths.

Hang on to your spread sheets

Now, before all of you scientific and mathematical wizards crunch up your statistical spread sheets to challenge what I have said, put the brakes on and think about any loss you have had where the dollars have had to flow. Also, was there a soft cost in public image, employee injury and effect on morale, loss of market, or loss of management time? Was that quantified and added to the obvious hard costs?

If you had such a catastrophe, could your business withstand the financial shock? Could it survive loss of key personnel? The one analysis that will shake you up is the financial contribution of your insurers. You will find, following a catastrophe, that the loss will partially, if not totally, fall under the policy exclusion. I have developed a law on this that I will share with you sometime.

And where does this all leave you now? Why, back at the beginning, of course. Prepare, analyze, monitor and consult, and if you have not done any of these things lately, "Get Crackin'."

Since 1978, Bill McGannon has been a risk manager handling all matters of risk analysis effecting the Petrochemical, Plastics and Gas Transmission Division of the Nova Group, including the purchase of all casualty and property insurance and matters effecting loss prevention engineering.

Scott Bricker retires

by Bonnie Shulman,
APSS Information Officer

Scott Bricker, Director of Training for Alberta Public Safety Services (APSS) retired last October after 15 years of dedicated service to the people of Alberta.

This was, in fact, Scott's second retirement. Sixteen years ago, he retired from the Canadian Armed Forces with the rank of major, after a career that spanned 29 years and included various command and staff appointments. Scott spent 13 years as a military training officer, rising through the ranks of the Armed Forces to become commanding officer of the Canadian School of Physical Education and Recreation at Camp Borden.

It was in 1975 that Scott joined Alberta Disaster Services, as APSS was then called, as a Training Officer. The leadership ability which had served him so well in the military became equally apparent in Disaster Services. He became Chief Training Officer, and in 1980, Director of Training. In this position, he supervised the continued progress of the Alberta Public Safety Services Training School.

The farewell luncheon for Scott and his wife, Alma, was held at the University of Alberta Faculty Club on October 25. The banquet room was filled with friends and colleagues from APSS and St. John Ambulance, where Scott served as Chairman of the Training Advisory Board for Alberta. Many of Scott's fellow Masons were in attendance, as well as a contingent from the Royal Canadian Legion.

Telegrams, cards, letters and commemorative plaques were presented to Scott from emergency training directors across Canada, who sent Scott their best wishes and congratulated him on the success and growing renown of the Alberta Public Safety Services Training School.

An avid recreational fisherman and bird watcher, Scott is looking forward to taking long camping trips and enjoying the great outdoors now that he has embarked on his well earned second retirement.

New prices for videos

Prices for educational videotapes offered for sale by Alberta Public Safety Services have been revised to include the new Goods and Services (GST) Tax. The new costs for these videos, including GST, are:

The Days of Ice and Snow	$80.25
The Five Stages of Rescue.	$53.50
On-Highway Inspection of Dangerous Goods	$48.15
Insight Subscription (for people outside Alberta)	$21.40 (Cdn)

All requests for copies of these videos should include a cheque for the relevant amount in Canadian funds, made payable to the Provincial Treasurer. Send requests to: Communications Branch, Alberta Public Safety Services, 10320 - 146 Street, Edmonton, Alberta T5N 3A2.

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Calgary Disaster Services works with industry to prepare for possible emergencies.

Calgary plans with industry to prevent disasters

by Rich DePatie, Co-ordinator
Disaster Services Division
Calgary Fire Department

Calgary has been fortunate never to have experienced a major disaster. Although a number of major emergencies have occurred throughout its history, seldom has one reached the extent of effecting the entire city.

Nonetheless, it's important that we don't allow this fact to delude us with a false sense of security. The potential for any number of catastrophes is very real. In the tragic event of a disaster, *preparation* is the key to a successful conclusion. It is an integral portion of the mandate of Calgary Disaster Services to be instrumental in facilitating the industrial sector to plan for these possible emergency crisis situations.

In Calgary, it has been proven over a period of years that pre-planning is the key to proper management of goods and services that have the potential for disaster.

Peacetime disasters, which include two categories, come under the headings of man-made or natural. Although Calgary suffered a major flood in the 1950s, our weather and geographical influences are fairly stable, making the possibility of a man-made disaster somewhat more likely.

The potential for a man-made disaster situation in Calgary is considerable due to many of the toxic chemical and flammable products being transported in and around our city. A high volume of air traffic frequenting the Calgary International Airport also presents the prospect of extensively disastrous circumstances. Fires, explosions, radiation, power outages and gas leaks must also be acknowledged as ingredients capable of creating disastrous situations or events. These factors and others make the development of emergency plans by industry a crucial measure in the protection of life and property of the citizens of Calgary. As an intrinsic component of the pre-planning process, the Calgary Fire Department has massed a myriad of pertinent information.

Questions for industry

Questions industry must ask itself and be satisfied that the outcome is correctly addressed and pre-planned for concern: proper hydrant locations, types of fire alarm systems needed, standpipe locations, the need for special fire pumps and special storage problems.

When special dangerous goods are manufactured or supplied, the following questions need to be addressed: types of material, types of containers, emergency response guide numbers, hazardous chemical code numbers, volume of material, United Nations and North American numbers, additional information required by response teams (water reactive substances and chemical compatibility), names and emergency telephone numbers of company representatives to contact, and water supply location (size of mains or containment pond volume).

Calgary's zoning by-laws, which designate where dangerous goods materials are located in relationship to the dangerous goods routes, have enabled us to pre-plan dangerous goods traffic (road mode) through the city core. All major suppliers who handle and offer dangerous goods for transport are required to submit a contingency plan of their facilities to the Calgary Fire Department.

Numerous major industrial and corporate facilities have taken the initiative to pre-plan for such events. Examples in the Calgary area include: Petro Gas Processing Limited, Stampede Disaster Services, Rhone-Poulenc Agriculture Division, Southern Alberta Institute of Technology, all Calgary-area hospitals and the Calgary International Airport.

Pre-planning essential

The enactment of the Workplace Hazardous Materials Information System (WHMIS) legislation has played a major role in providing information to response teams in the event of an emergency. All chemicals shipped or manufactured are not necessarily done so using a trade name. Many chemicals are manufactured using a number sequence only. The use of material safety data sheets has made the job of the emergency responders much less hazardous because they now know the content of such manufactured or shipped goods and can react accordingly. Again, pre-planning rears its head.

Because of the possibility of contamination of personnel and equipment during a large-scale emergency, pre-

MIACC NEWS

Major Industrial Accidents Co-ordinating Committee

Volume 5, No. 1, 1991

An excellent AGM, new directions and a new Chairman

Mark Egener, Managing Director of Alberta Public Safety Services, was elected MIACC Chairman at the November AGM.

MIACC's new Chairman is **Mark Egener**. No stranger to our organization, Mark has been thoroughly involved in the MIACC process since its early days. Participating in the Bhopal aftermath review, which led to the formation of MIACC in 1987, he was one of our co-founders, a member of the Steering Committee, and member of a working group.

Managing Director of the Alberta Public Safety Services since 1983, Mark was responsible for initiating Alberta's regional MIACC-A operation. He was previously employed by a major energy company in Calgary, and spent several years with the federal government. He graduated from the Royal Military College of Canada and the University of Western Ontario, earning a Mechanical Engineering degree as well as a Master of Arts.

APSS is a Government of Alberta agency responsible for ensuring that plans are in place to reduce the likelihood of serious emergencies and disasters.

We are most pleased to welcome Mark to this new, challenging role.

A tribute to outgoing Chairman ***Jean Belanger*** *was made at the AGM on behalf of all MIACC constituents. To thank him for his "simply outstanding job of leadership", the joint presentation of a Canadian goose carving was made by new Chairman Mark Egener and Executive Director Michael Salib.*

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The AGM in brief: lively and successful

Held in the rustic setting of Montebello, Quebec, MIACC's fourth Annual General Meeting was, as voiced by many attendees, a most pleasant, productive experience. Charged by the warm, informal atmosphere at Le Chateau Montebello, delegate participation was thoughtful and intent.

Outgoing Chairman **Jean Belanger** opened the two day meeting on November 7th. He spoke of MIACC as a young, trail-blazing operation that had grown significantly during his two year term - in stakeholder and steering committee membership as well as numbers of contributors to its work.

He continued that a Government-sponsored review of MIACC in 1990 had determined that the organization was on the right track, but needed financial independence and accountability, and a Federal champion to spear the drive for public awareness - the Minister of Environment had been suggested. As a result, said Mr. Belanger, the Federal Government proposed to take up a share of MIACC's future funding if this was matched by the other stakeholders. The provinces have also agreed to participate in the funding of MIACC.

He proposed a letter to non-governmental stakeholder organizations to ask for contributions of $3,000 each in support of MIACC. The Chairman urged delegates to

The AGM in brief: lively and successful (Cont'd)

promote this request within their affiliations, for the alternative was, he suggested, that MIACC might not survive.

"We can organize in our own domains to meet emergencies," he said, "but how do we react together when it really happens? If responders meet for the first time at an accident, time is wasted when there is no time to waste. The damage will be done."

Pointing out that MIACC is an integrating organization which builds on trust and mutual confidence, Mr. Belanger said that by demonstrating its credibility, MIACC would have privileged access to governments in how processes and regulations must develop. "We face a major dilemma," he concluded. "If we do our job right, we will not be noticed. But we will have the satisfaction of a job well done."

Actions of 1989-90

An overview of the past year was given by **Michael Salib**, MIACC's Executive Director. Recommendations on products and programs from the previous AGM had been actioned by the working groups themselves, he said, and those of a policy nature were actioned by the Steering Committee. One example was that Jean Belanger had written to all Ministers responsible for land planning in Canada, urging them to incorporate buffer zone requirements in their legislation. The Ministers' response was positive, encouraging, and showed a keen interest in the work of MiACC, and WG5 (buffer zones) in particular.

MIACC had contributed to the Green Plan consultations. Specifically, MIACC recommended that the Federal Government utilize the MIACC approach for achieving Green Plan goals; use MIACC as a major vehicle in planning the exchange of information and in developing those plan components that relate to prevention, preparedness and response; and further, include MIACC in all consultations in respect of self-regulation or legislative initiatives.

Changes in the Steering Committee were that the Canadian Trucking Association withdrew, and Agriculture Canada, the Canadian Centre for Occupational Health & Welfare, and the Railway Association of Canada joined.

> **"We face a major dilemma," he concluded. "If we do our job right, we will not be noticed. But we will have the satisfaction of a job well done."**
>
> *Mr. Jean Belanger, MIACC past Chairman*

"In 1991," Mr. Salib said, "additional representation will come from labour groups, the emergency medical services organizations, and environmental public interest groups." The future work of the secretariat, he declared, would focus on widening the stakeholder base, assisting the working groups to achieve their goals, and - a major undertaking - monitoring the implementation of working group products.

Mr. Salib described the next in the emergency response series of conferences, ER '91 planned for Calgary, as a showcase for MIACC products and a vehicle for technology transfer. The AGM was intended as a working meeting format to review MIACC's activities to date and to develop the policies and courses of action for the next few years.

Getting the working part of the meeting underway, Working Group Co-ordinator **Pierre Brien** introduced each group's chairman to present summary reports of the year's endeavours. Pierre commended the work carried out and the spirit of co-operation in the working groups. Their reports and final recommendations are summarized within the Newsletter.

An interesting talk by **Dr. Fred Millar** of the Friends of the Earth Society closed the morning plenary sessions. Dr. Millar presented examples of the U.S. experience in chemical accidents, and showed how they demonstrated two particular needs to reduce the probability or severity of accidents: to make relevant information widely available as soon as it is gathered, and to reduce stocks wherever possible in plants, warehouses or on railway property.

For the remainder of the first day, full and lively workshops concentrated on the past and future activities of the working groups. Each was led by a Facilitator who kept the discussions objective and on track, and Rapporteurs were selected to report recommendations back to the meeting delegates.

Day Two - Regionalization, Rapporteurs and Reports

Mark Egener, Managing Director of the Alberta Public Safety Services, opened the second day with a report on the

The new Steering Committee takes time from the AGM to pose for a photo.

The AGM in brief: lively and successful (Cont'd)

regionalization of MIACC, a full account of which can be read on page 7. Summarizing the status of each province, he explained that regionalization would promote understanding of MIACC, facilitate its implementation locally and provide feedback to the national organization.

Rapporteurs then presented workshop recommendations, triggering comments and questions from the floor, following which work plans and recommendations were endorsed. **Duncan Ellison** of Health & Welfare Canada summarized the workshop findings, which help to determine the future directions of MIACC. The summary, Mr. Belanger declared, essentially supported the thrust of current MIACC activities and said the Steering Committee will use it as a basis for future meetings. He acknowledged in particular that the Steering Committee must now evolve a legal structure in which MIACC could operate on behalf of all stakeholders.

The day's luncheon speaker was **Mr. Jacques Beaudoin,** Deputy Minister for Quebec's Securite Publique Department. Standing in for **The Hon. Claude Ryan**, Mr. Beaudoin spoke with eloquence and quiet flashes of humour to an appreciative audience about the work and aspirations of his department.

Hello and farewell

In the Business Session, the 1990-1991 Steering Committee was elected unanimously, and the AGM broke to allow the new committee to meet briefly to elect the new chairman.

Attentive delegates in the plenary session.

Resuming the plenary session, Jean Belanger's thoughtful farewell to the delegates likened the growth of MIACC to a construction project. It had taken two years, he said, to dig the cavity and shape the concrete foundations. At this meeting, he saw the concrete being poured and the house starting to take shape. From the members, he had gathered a sense of accomplishment, satisfaction and commitment. "Your dedication," he said, "is going to place MIACC as the centrepiece of industrial accident prevention." In particular, he thanked Michael Salib for doing such a commendable job in very difficult circumstances.

Presenting Mark Egener, elected by the new Steering Committee to the position of chairman, Mr. Belanger said "I am delighted with Mr. Egener's personal commitment and pleased that he is representative of another crucial grouping within MIACC."

Mr. Egener took the podium for a brief address and praised Mr. Belanger for a "simply outstanding job of leadership over the past two years". He had taken MIACC from a shaky beginning to where, today, it is demonstrating to all its constituents that it is a valuable process. As well, as head of a dynamic, industry association that had shown leadership in many innovative safety programs, Mr. Belanger had been awarded the United Nations Environmental Award.

Mr. Egener went on to speak of his strong impression of the meeting and the work that has advanced so dramatically. "No one individual, organization or government," he said, "could have singly created the products that are now emerging."

On behalf of all MIACC stakeholders, he and Mr. Salib then presented a farewell memento to Mr. Belanger.

Concluding the meeting, Mr. Salib advised that next year's AGM would be held in Ottawa on November 6th and 7th, and reminded everyone that ER '91 would be held in Calgary on May 28-30th. Dates to remember!

Working Group reports and recommendations

There was a major purpose to November's AGM. It was to review the year and direct the future activities of the working groups tasked to study and produce information, guidelines and standards that will be promoted for use in Canada by MIACC stakeholders. This was achieved at Montebello through workshop discussions and consensus, and the accord reached by delegates in plenary.

Full working group reports and products, and a full account of the AGM, are available on request from the MIACC office. What follows is a summary of the workshop discussions and resolutions.

WG1: Risk Assessment Guidelines for Canadian Municipalities

Co-chairs:	**Dr. Ann Robinson**, Ontario Department of Labour and **Dr. John Shortreed**, University of Waterloo
Facilitator:	**Graham Creedy**, Canadian Chemical Producers' Association
Rapporteur:	**Denis Pratt**, Transport Canada

WG1 developed detailed methodology for the guide which will aid risk management of hazardous installations and transportation movements in Canada. The guide contains hazard identification criteria - lists of substances and threshold quantities that require assessment of their risk. Consideration was given to the fact that these lists would become a CSA standard and would be reviewed every two years.

List 1, the first priority list, was endorsed by the delegates subject to a few changes. It was suggested that the threshold for chlorine be 1 tonne, that tetramethyl lead be considered for inclusion in the list, and that the status of sodium chlorate be reviewed. The conceptual basis for Priority List 2 was also examined. Intended to be a new, separate list rather than a revised TDG Schedule XII list, this will be submitted for approval at next year's AGM.

The techniques for risk assessment were adopted for implementation in the guide, with the Dutch risk assessment method seen as a useful tool and a good starting point. Completion of the guide as a MIACC product was endorsed with an estimated budget of up to $300,000. Conversion to a computer program would make the guide available in a simpler format.

WG2: Training Standards for First Responders

Chairman: **Lorne MacLean**, Canadian Association of Fire Chiefs
Facilitator: **Victor Bennett**, Canadian Petroleum Products Institute
Raporteur: **William MacKay**, Esso Chemical Canada

The term 'first responders' is held to include police, fire and ambulance services, as well as industry specialists who respond to in-plant incidents. During the year, the group was familiarized with the NFPA 472 standard, which specifically addresses the competency levels of technicians and specialists. Efforts also determined a standard means of specifying minimum requirements of competence for responders, and established a basic library of reference documents and related training materials that would satisfy those minimum requirements.

AGM delegates reaffirmed the adoption of NFPA 472, and agreed that the library should include training aids such as videos. It was recommended that the effective delivery of training material be evaluated, and that the group seek endorsement of training materials and programs, as well as accreditation of courses and individuals to ensure quality of training. Future work will include on-going refresher training. WG2 will continue to involve ambulance and other first response medical personnel, and also the nuclear and propane gas industries.

Pierre Brien, Working Group Co-ordinator facilitated the reports and plenary discussions

WG3: Contingency Planning Guidelines for Canadian Municipalities

Chairman: **Larry French**, Emergency Preparedness Canada
Facilitator: **Majorie Matthews**, Transport Canada
Rapporteur: **Angela Prawzick**, City of Cornwall

The emergency planning guidelines developed by Emergency Preparedness Canada (EPC) have been the basis of this group's activities. It was agreed that the multi-hazard approach was the most effective, but that specialized appendices dealing with specific types of hazards could be developed for the basic planning guidelines.

The expansion of the working group to include representation from provincial and municipal groups was approved, as was the development of general principles for emergency planning and preparedness from the EPC guidelines. The new product, which will be assessed by WG7, will be interfaced with industry emergency response plans and produced as a MIACC document.

WG4: Accident Trends Analysis

Chairman: **Lynn Provost**, Environment Canada
Facilitator: **Vito Volterra**, Shell Canada Chemical Company
Rapporteur: **Gary Zikovitz**, Ontario Ministry of the Environment

The Accident/Loss Prevention Directory produced by WG4 consists of three parts:
I - Canadian federal/provincial/territorial legislation
II - Canadian/Foreign accident reporting/collection systems;
III - Canadian Foreign Publications and other information sources.

A consensus was that the bilingual directory provided clear, useful information which should be expanded to include legislative listings in Part I, indicating which parts of Acts apply to MIACC's mission. It was agreed that the directory should be updated (and disseminated by MIACC) every two years.

Because of the gaps and inconsistencies in reporting systems in Canada, it was recommended that the international exchange of accident case histories involving hazardous substances established by the Organization for Economic Co-operation and Development (OECD) be implemented in Canada on a trial basis.

Delegates agreed that the accident costing study carried out by Transport Canada was an effective tool to predict and identify expected values of losses, and recommended that the data base be expanded.

WG5: National Guidelines for Buffer Zones

Chairman: **David Belgue**, Quebec Municipal Affairs
Facilitator: **John Shrives**, Environment Canada
Rapporteur: **John Easterbrook**, Dow Chemical Canada Inc.

A framework for determining appropriate buffer zone requirements which could be included in provincial or municipal land use planning and control was developed. A matrix approach describes the compatibility of the various combinations of adjacent land uses to identify the levels of potential

Working Group reports and recommendations (Cont'd)

impact. The group will develop the most frequent and credible scenarios for incidents involving chemicals, and, in liaison with WG1, create a range of values for different effects. Results from studies in Hamilton, Montreal and Alberta by WG1 may be integrated into the buffer zone guidelines.

The continuation of WG5's workplan was recommended, and the need to publicize its results or findings was endorsed.

WG 6 & 8: Co-ordination of Chemical Information Systems and Emergency Medical Treatment Information

Chairman: **P.K. Abeytunga**, Canadian Centre for Occupational Health & Safety
Facilitator: **Bob Loader**, Syncrude Canada Limited
Rapporteur: **Eric Leggatt**, Ontario Ministry of the Environment

The basic requirements for an information systems network has been developed, and a draft list of known information systems is being reviewed. It was recommended that WG6 and WG8 be merged and become a standing committee, since this work will always require updating. Members from a broad range of related backgrounds are solicited.

It was recommended that users and user needs be identified, with medical profession needs addressed by a task force. A 'road map' to relevant sources of information should be developed. The workplan for this group includes: setting up a network of information systems; examining the means of convenient and timely access to information; identifying gaps and overlaps in existing information systems; and exploring joint projects for the verification of data.

WG7: Contingency Planning Guidelines for Public and Private Facilities

Chairman: **Doug Hill**, Nova Corporation
Facilitator: **Art O'Connor**, Canadian Chemical Producers' Association
Rapporteur: **Al Schulz**, Alberta Environment

The draft plan produced by this group could be adopted as a CSA standard that could be easily used for emergency planning by all sizes of Canadian companies. The relationship between the CSA and MIACC needs to be clarified, with a memorandum of agreement between them. It was recommended that the group be considered a CSA technical committee to oversee the standardization of their products. A liaison with the Standards Council of Canada is being established for guidance.

Delegates agreed also that the software package development by Impact Research Services was necessary for the emergency plan development and to enable a quick update of existing plans. It is anticipated that, when finalized, this package could sell for less than $1,000 per system.

Working Groups such as this one held detailed discussions.

WG12: Accident Prevention Activities

Chairman: **Wayne Bissett**, Environment Canada
Facilitator: **Pierre Robichaud**, Quebec Association Canadienne des fabricants de produits chimiques
Rapporteur: **Grahame Blundell**, Alberta Public Safety Services

A hazardous chemicals life cycle management project was begun, studying particularly hydrofluoric acid, to develop recommended practices for the safe manufacture, transport and use of hazardous chemicals. This would include effective mitigation of and emergency response to releases. A workshop is scheduled for January 1991 in which users, transporters and manufacturers would share their expertise in managing toxic chemicals. The group has been asked to support the U.N. Environment Program in its preparation of an annotated bibliography for the Awareness and Preparedness for Emergencies at Local Level (APELL). This document was considered useful, and financial resources have been made available by Environment Canada.

In concert with WG4, WG12 acted as a clearinghouse to identify prevention resource documents. Plans are to increase this activity to enable the transfer of knowledge.

ER '91

The Technological Response to Dangerous Substances Accidents

Westin Hotel
Calgary, Alberta
28 - 30 May, 1991

This international conference is the third in a highly successful series. It will focus on integrating technology, equipment and people into an effective system that meets the need for prevention, preparedness and response to accidents.

For more information and registration forms, contact *MIACC*.

Tel: (613) 990-1133 or
Fax: (613) 954-4915

Highlights from policy discussions

Issues of a policy and administrative nature were discussed in workshops and presented to the plenary by **Duncan Ellison** of Health & Welfare. The findings, a synopsis of which follows, will form the basis of future Steering Committee discussions.

Duncan Ellison presented a summary of the policy issues and findings.

MIACC as a preferred forum: Delegates wished MIACC to be used as a preferred consultative forum by the Federal Government. It was commented that MIACC will become a more viable forum when it has increased stakeholder participation at the provincial and municipal level, and when it gains credibility for its outputs. Products must be produced soon.

Guidelines or minimum standards: Where appropriate, the preference was to have outputs developed as minimum standards. Approval procedures will depend on whether MIACC is able to develop standards or work with an existing standards issuing body such as the Canadian Standards Association to produce standards jointly. Consultation should be made with the Canadian Standards Council, and the Steering Committee should consider whether standards are an appropriate route for WG 7.

Regionalization: A provincial, multi-provincial or sub-provincial process, regionalization could permit the testing and implementation of MIACC products. Strong linkages and feedback to the national MIACC should be established. For example, regional groups could hold their annual meetings at the same time and venue as the ER conferences. MIACC-A was found to be a good model of regionalization.

MIACC organization: A task force to study MIACC's overall structure was suggested. This would include reviewing legal steps, including by-laws, to enable the financial transactions of MIACC, and to protect its employees and members. Recommendations should be submitted to the Steering Committee within six months.

Operational plan: The submitted plan was considered appropriate, but in need of more funding than the budget proposed. The concept of regularized, equitable and orderly funding needs to get underway with specific sponsorship for projects. Solicitation of funds should be made early in budgeting cycles of stakeholder organizations.

Promotion: All stakeholders are urged to use every opportunity possible to promote MIACC - through conferences or their own organization's newsletters. The frequency of MIACC's own newsletter should be examined, with possibly a news sheet alternating with the regular publication. A formal communications plan was recommended.

Future AGMs: Cost, venue and accessibility should be considered, as should the length of the AGM. Could it be replaced with mini-meetings around the country? Regardless, papers and working group reports should be circulated well ahead of time.

New work areas: The establishment of several new working groups was recommended. One should look into alerting and reporting procedures, especially in the case of multi-jurisdictional needs; another should prepare an index of emergency response contractors; and another should collect and compile all legislative acts and regulations that would apply to MIACC's mission. Working Group 2 is asked to examine accreditation and certification of training programs. It was stated there should be a greater input from the nuclear industry which has much experience in training standards and emergency response planning.

Industrial Safety and Loss Management

Every year, Industry suffers enormous losses from workplace accidents that can mean injuries to people, damage to equipment or plants, production losses, environmental damage, insurance and retraining. In Canada, these losses cost $14 billion per year, according to the Canadian Society of Safety Engineering, and excludes the cost of human suffering in terms of deaths and serious injuries.

In a dedicated effort to improve this situation, the University of Alberta is providing courses in Operational Safety and Loss Management to 4th year engineering and business students of all disciplines. The university's premise is that a large percentage of these graduates will move in their careers into positions of influence, leadership and management.

The program is led by a former loss management executive - Visiting Professor, **Laird Wilson**. Wilson places emphasis on the continuous and consistent approach of safety and loss management to reduce the risk of accidents. In particular, he emphasizes the importance of decisions of engineers and business managers in protecting workers, industry assets and the public in general. The courses concentrate on risk analysis, risk management and loss control as well as management, motivation and leadership skills.

Attracting on average 75 students per term, the courses have been developed in consultation with industry, government and the Faculties of Engineering, Business, Medicine and Extension at the University of Alberta. Guest speakers are invited from industry, government and labour, and the students also visit industrial sites. These include construction, refining, chemical, manufacturing, oil sands mining and refining, public service and others.

Industry and Government have been financially supportive of the University's program and have also committed to support a Chair in Safety Engineering and Loss Management, which will allow a continuous improvement in the programs offered by the University.

* * *

Regional groups — a report by Mark Egener

"The process by which MIACC products are delivered to users such as muncipal governments, industry plant sites and provincial governments is MIACC regional groups," said Mark Egener in his report to the AGM. He explained the purpose is to:

- promote understanding to a larger audience than a national organization is able to do
- provide a means of implementing programs and products
- deal with regional issues such as enabling bylaws in municipalities, and enabling legislation of, say, buffer zones at provincial levels
- co-ordinate local groups of stakeholders
- provide regional input into the national MIACC organization

Commenting that the Steering Committee itself is now actively involved in promoting regionalization, Mr. Egener said that the local process usually begins with a regional government committee before expanding into a true local group. His report showed the status of the provinces as follows:

	Planning	Established	Comment
Newfoundland			No activity
P.E.I.			No activity
Nova Scotia			No activity
New Brunswick	X		Gvt. committee formed
Quebec	X		Regional group proposed Some ad hoc local groups
Ontario	X		Gvt. committee proposed Extensive local groups
Manitoba	X		Considering Gvt.committee Some ad hoc local groups
Saskatchewan	X		Planning Gvt. committee Planning regional MIACC
Alberta	X	X	Regional MIACC 1988 Some local groups
British Columbia	X		Gvt. committee proposed

Mr. Egener described Alberta's regional activities as typical of what local groups would undertake. MIACC-A has started to identify sites of hazardous substances noted by working group one; it has looked at legislation with regard to buffer zones; and a working group has been struck to oversee implementation of buffer zones. It is also examining ways to support the CAER process, and the reporting of incidents. A communications working group is promoting understanding of MIACC in Alberta, and carrying out high technology pilot projects to improve public warning and to look at product identification.

Mr. Egener concluded that 1991 will be a year to get regionalization underway so that products and programs can be implemented.

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If you wish to remain on our mail list for the newsletter and other items of interest such as ER '91 information, kindly complete and return this form. Or is there someone else in your organization who might like to receive this material? In the interests of conservation of paper, energy and costs, please restrict the number of copies to a minimum per organization. Thank you.

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MIACC Steering Committee 1991

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arranged procedures need to be worked out to decontaminate the affected areas of concern. In Calgary, the procedures used are those implemented by the Hazardous Materials Committee of the Canadian Association of Fire Chiefs.

The need to pre-plan cannot be over emphasized. In the event that Calgary industries are tested by unforeseen events, Calgary Disaster Services is confident that losses in all categories can be held to a minimum because of pre-planned procedures.

The phones are busy during exercises testing the government's sour gas emergency response plan.

ESSO RESOURCES CANADA LIMITED

Esso Exercise at Edson:

Industry plays a key role in sour gas response plan

Editor's Note: In 1982, an uncontrolled blow-out at a sour gas well near Lodgepole, Alberta, demonstrated the need for a comprehensive and co-ordinated plan by industry and government to respond to future sour gas releases. The development of the resulting sour gas response plan has served as a model for planners, and has already proven itself in subsequent sour gas incidents. This article discusses the plan and a recent exercise where it was tested with Esso Resources Canada Limited.

The Government of Alberta's Emergency Response Plan for a Sour Gas Release was developed in 1983 in the wake of the Lodgepole incident. What is now part of oilpatch jargon, Lodgepole was a major blow-out at a drilling sour gas well — a loss of control that went on for 68 days in the fall of 1982. The smell of the gas from Lodgepole was evident in Edmonton, some 150 kilometres away, and there were reports of it travelling as far as Winnipeg.

The purpose of the Emergency Response Plan for a Sour Gas Release is to protect the health, safety and welfare of everyone who might be exposed to sour gas emissions. The plan brings together all of the government resources needed to support the industrial operator and the Energy Resources Conservation Board (ERCB) so that the release is brought under control quickly, safely and effectively.

The role of the ERCB in the plan is to set up a main control headquarters to help the company involved in the incident. The company remains responsible for the emergency response, except in cases where the incident goes beyond the industrial response capability. In these incidents, the ERCB is in charge.

As with all emergency plans, it is essential that the Alberta plan is tested regularly so that all the players know what to do and when to do it in the event of a sour gas release. Since the plan's inception, there have been annual exercises organized by the government to test the plan. In addition, there have been two major exercises involving industrial operators (Chevron Canada Resources Ltd. and Texaco Canada Resources Ltd.). The plan has been activated three times during actual sour gas emissions.

At the end of October 1990, Esso Resources Canada Limited held a major exercise at Edson. Much of the planning was undertaken by Esso with the help of the ERCB and Alberta Public Safety Services (APSS). The objectives of this exercise were to test the interaction between Esso and government departments, to exercise the Esso Crisis Management Team and to provide key players with experience in dealing with the media and the general public. A private consulting firm was engaged by Esso to provide realistic media input and to simulate news conferences during

Industry is increasingly working with local communities to co-ordinate and test emergency response plans.

ESSO RESOURCES CANADA LIMITED

the exercise.

The emergency scenario described a sour gas release at a well located near Obed, which is located between the towns of Hinton and Edson, Alberta. Role play called for three fatalities, four injuries and an out-of-control well that forced the evacuation of the few houses in the Hamlet of Obed, closure of the Yellowhead Highway, and caused concern in both Edson and Hinton.

Keep the public informed

The main emphasis of the Alberta government's sour gas response plan is to ensure the public is protected and receives useful and accurate information during the emergency. The plan calls for the setting up of a Main Control Headquarters (MCHQ) by the ERCB and an adjacent Public and Media Inquiry Room (PMIR). The headquarters is staffed by designated emergency response personnel from the operator, in this case Esso, police, medical advisors, transporation experts, local elected officials and permanent staff from the municipalities affected by the emission, and by public affairs specialists from the Public Affairs Bureau of the Alberta government. The inquiry room is staffed almost exclusively by the Public Affairs Bureau, which has two emergency response teams on permanent standby.

There are two stages in implementing the full provisions of the plan. A Category 1 is a stand-by call. A Category 2 calls for the immediate setting up of the Main Control Headquarters and the Public and Media Inquiry Room. The headquarters is usually set up, at least in basic form, immediately after the incident occurs. With the existing call-down procedures, the Public Affairs Bureau team can be at any of the previously designated 10 centres across the province within two hours of a Category 2 emergency being declared by the ERCB.

Exercise Obed started at 0830 by assuming that the actual release had taken place earlier, and both the Main Control Headquarters and the Public and Media Inquiry Room were in position. Operation rooms were also set up at Esso and ERCB headquarters in Calgary, and Esso established a headquarters in Edson that was staffed by technical and public affairs experts. As the exercise progressed, it became apparent that it was difficult to co-ordinate all of these different operation centres, and that co-operation and communication between the Main Control Headquarters and the Esso headquarters in Edson was the key to the effective response to the incident.

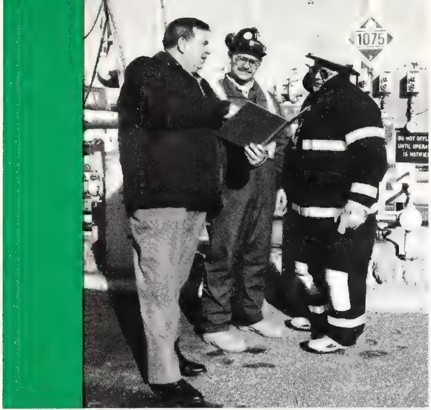
It was apparent that difficulties arose because the key players were not co-located at the MCHQ. As a result, the flow of information to the public and the media was not consistent, largely because of inadequate communication and the transfer of updated information to the media.

The lessons learned

As is always the case at every exercise and actual incident, important lessons were learned at Edson. One of the lessons learned was the need for ERCB and industry personnel to be present at each other's control centres to ensure a continuous and co-ordinated flow of information between the centres and to the public.

With an incident of this nature, in real life there would be public inquiries from across Canada. A steady flow of news releases would have been needed, which cannot be produced without the necessary copying and faxing machines. Within two hours, media from Edmonton would be on site, television crews would want pictures, and Canadian Press and Broadcast News would cover the event with at least a stringer (a freelance reporter hired to cover local events). In real life as well, the phones in the Public and Media Inquiry Room would have been ringing off the hook. The interest of the media is frequently underestimated and usually grossly underestimated.

Difficulties notwithstanding, the benefits gained through the exercise fully outweighed any problems that were noted. The lessons learned at every exercise and incident can then be incorporated into future plans, which is why exercises are held. Exercise Obed provided valuable insight and knowledge into the co-operative efforts required between government and industry when dealing with a serious event, and the need for co-ordinated activities.



MAY FU

Ralph Holmes (left) works closely with industry and local communities to develop co-ordinated emergency preparedness activities.

On the job with Ralph Holmes

by Bonnie Shulman,
APSS Information Officer

For three decades, Ralph Holmes has worked in industry, including stints as a field engineer in the mechanical and nuclear division of a major corporation, and as a maintenance supervisor for utility companies in Canada and the United States. He has served as a firefighter and emergency medical technician, learning first hand about the value of emergency preparedness and response.

Today, Ralph contributes his combined expertise in the areas of emergency prevention, preparedness and response at Alberta Public Safety Services, where he has been the agency's first Co-ordinator of Industrial Programs for almost two years. Ralph came to APSS in 1982 from his position as department head at Keyano College in Fort McMurray, where he managed the Syncrude Project that delivered apprenticeship training at the Syncrude site. As a dangerous goods training officer and the branch head of the Dangerous Goods Training Branch at APSS, Ralph has helped in the design, development and delivery of training programs to inspectors of dangerous goods facilities and to on-highway inspectors throughout Western Canada.

As Co-ordinator of Industrial Programs, Ralph spends a great deal of time on the road, assisting industry to develop and co-ordinate its emergency preparedness activities with those of the local community. He works closely with the industrial associations and their member companies and the emergency services of Alberta communities. Industry, says Ralph, has taken a very positive approach in working with the local community on activities that will improve public safety.

"When industry and the community work together, the resources available to the community in the event of an emergency are greatly increased," he says. "This partnership also brings together the expertise of the community's emergency services and that of industry."

As examples of industry activities to make communities safer places to live, Ralph cites the Responsible Care policy of the Canadian Chemical Producers' Association, particularly its Community Awareness and Emergency Response (CAER) and Trans-CAER (Transportation Community Awareness and Response) codes of practice, industrial mutual assistance programs such as Fort MAP and SD MAP in Fort Saskatchewan and Strathcona County respectively, specialized response teams, equipment and training.

Ralph's goals for the future are clear. They include the implementation and refinement of industrial and community public safety activities in a co-ordinated manner across Alberta. "This will reduce the duplication of effort, and the total emergency response capability will be heightened," Ralph says.

New option for TDGC violators

As of December 1, 1990, regulations under the Alberta Provincial Offences Procedure Act have been amended to allow violators to have the option of making voluntary payments or having a court hear their cases.

Prior to this amendment, all prosecutions under the provincial Transportation of Dangerous Goods Control Act (TDGC) and Regulations were undertaken by way of a court appearance. This process was quite involved for both the Crown and the Defence, and could cause considerable expense for both parties. The benefits of this new option are reductions in court time and the overall costs for court appearance.

This new amendment does not introduce any new violations, but allows for the inclusion of more routine offences. The three levels of fines are consistent with the averages that have been levied by the courts. Fines for level one offences, considered the most serious, have been set at $600; level two fines for moderate offences are $400; and level three fines for minor offences are $200.

For serious offences, the Crown will retain the right of proceeding with the matter by way of court appearance and seek higher penalties than the ones specified in the Provincial Offences Procedure Act regulations.

For more information, phone the Alberta Public Safety Services Co-ordination and Information Centre 1-800-272-9600 (toll-free in Alberta) or 403-422-9600, 24 hours a day.

GOV'T OF ALBERTA

A number of courses and seminars on hazardous materials and emergency response are available to interested industry personnel.

Training: The key to industrial emergency response

by Ralph Holmes, Co-ordinator,
Industrial Programs

A large sector of Alberta's economy is based upon the chemical and petrochemical industry. Although these industries design and construct their facilities and transport systems to stringent safety standards, it is impossible to avoid all risks. These risks are usually managed within specific levels of tolerances, which are influenced by various constraints such as economics, technological limitations and the human factor.

Although emergencies are rare, it is necessary for industrial sites and transport systems to be prepared for the unplanned event which involves dangerous goods. This preparation begins with the development of an emergency plan. The plan is put together based upon the results of a risk analysis. In many cases, this plan includes a response capability by industry, which is either provided by individual companies, through an association or a contractor.

How does industry develop and maintain a response capability? Many industries devote a great deal of resources to achieve a first-rate capability. This includes the procurement and the maintenance of fire and other safety equipment. The most important resource of all is the highly trained personnel who will carry out the response.

To train these people, and maintain their skills, many large companies operate their own training sites where they train their staff and other response personnel in the community. Many of these facilities provide product-specific and fire training. The training grounds at these sites typically have a tower, railway tank cars, tank trucks, product tanks, smokehouse, Christmas tree, impinged jet, pressure pit, hot tub, leaking pumps, valves and flanges.

Other training programs are provided through the industrial associations. A good example of this is the courses offered through the Petroleum Industry Training Service (PITS), which is the training arm of the petroleum industry.

There are also a number of new activities now under way that have the potential for upgrading the skills of people responsible for these areas. One such project is being undertaken by MIACC-A (Major Industrial Accidents Co-ordinating Committee -- Alberta), the Alberta wing of MIACC, a voluntary body uniting government, industry, the academic community, and emergency response organizations in an effort to prevent and mitigate the effects of major industrial accidents.

MIACC-A is examining the feasibility of a certification program in the areas of safety, loss prevention, emergency planning, emergency response and waste management. What would be new with this approach would be the recognition of extra-institutional credits awarded to many industrial training programs. With this type of approach, the training and upgrading needs of Albertans would meet the high training standard required by government or industry.

The following represent a good cross-section of the courses and seminars available to those interested in hazardous materials and/or emergency response training.

1. Petroleum Industry Training Service (PITS)

(Tel. 1-800-667-5557, Calgary)

A sampling of the courses offered by PITS includes:

H_2S Alive and H_2S Rescue This two-day course prepares the candidate to recognize hydrogen sulphide hazards and to perform safe rescue operation during a hydrogen sulphide emergency.

H_2S Instructor This course prepares the candidate to teach the H_2S Alive and H_2S Rescue courses.

Confined Space Entry This two-day workshop is designed to enable the candidate to work in potentially hazardous environments. It includes an emergency rescue scenario.

Oil Spill Containment and Recovery This three-day course is designed for persons directly involved in oil spill containment and recovery and makes extensive use of various types of containment and recovery equipment.

On-scene Spill Commander Course This three-day course teaches theory and hands-on training in the emergency handling of high vapor pressure releases and includes the physical ignition of controlled high vapor plumes.

2. Provincial Government Training Programs

The provincial government offers a number of programs of value to industry. These include courses offered by Alberta Labour through the Alberta Fire Training School and by Alberta Public Safety Services through its Training Division.

i) Alberta Fire Training School

(Tel. 853-5800, Vermilion)

Industrial Firefighter Courses Part I is a 16-hour course that addresses fire behavior, the characteristics of flammable liquids and loss prevention

At a training facility near Genessee, which is operated jointly by the Petroleum Industry Training Service and the City of Edmonton, pipeline crews learn how to ignite releases of high vapor pressure products.

activities, plus the use and care of standpipe hose and fire extinguishers. Part IA is an eight-hour course directed towards the use, care and maintenance of different types of self-contained breathing apparatus. Part IB is a 16-hour course on the use, care and maintenance of dry chemical fire extinguishers.

Part II is a 16-hour course that will develop the skills necessary in applying water fog to pressurized flammable liquid leaks and spill fires.

Part III is a 16-hour course designed to teach the candidate the manipulative skills necessary in applying water fog to pressurized flammable liquid/gas leaks and spill fires to facilitate valve control.

Radio Procedures Seminar This four-hour course is designed to introduce a system of radio procedures for better, more precise communications.

Dangerous Goods First Responder Levels I and II This program is open to industry and provides both the awareness and the operational level of training for the first responder to dangerous goods incidents.

Dangerous Goods Incident Command This course will assist in determining the role of trainees in the systematic approach to managing a dangerous goods incident at the scene.

ii) Alberta Public Safety Services

(Tel. 422-0346, Edmonton)

Alberta Public Safety Services provides the following programs that are popular with industry:

Dangerous Goods Response This three-day course provides response personnel with the skills required to make decisions at a dangerous goods incident.

Emergency Site Management This four-day course brings together personnel from a number of organizations that would handle a major emergency resulting from a natural or man-made disaster. The candidates must use all their resources to be successful in handling the ever-changing scenario.

Rescue Leaders Course This five-day course teaches skills required to lead a rescue team in basic emergency rescue techniques.

2. University of Alberta

(Tel. 492-3113, Edmonton)

The University of Alberta offers a number of courses and seminars to industry. Some of the more popular programs are:

Occupational Health and Safety Program This 325-hour certification program prepares the candidate to become a practising safety professional by covering the principles of safety science, accident control, loss management and injury prevention. Many of the principles learned may be related to the emergency response field.

Risk Assessment and Risk Management Seminar This two-day seminar teaches industrial personnel a number of principles to take back to their workplaces.

Management of a Biohazardous Work Environment This 16-hour course covers the safety and legal implications and procedures of work areas containing inherent hazards due to micro-organisms and other biological contaminants.

Dangerous Goods Response This 16-hour course is a co-operative venture between Alberta Public Safety Services and the university. It provides information about the hazards of dangerous goods and a standardized approach to a dangerous goods incident.

4. Mount Royal College

(Tel. 240-6929, Calgary)

Emergency Disaster Response Seminar This new one-day seminar being held on April 18 is offered jointly by Mount Royal College and Alberta Public Safety Services. The seminar is intended to familiarize participants with government emergency response organizations in Alberta, and to provide an introduction to dangerous goods.

5. Lakeland College

(Tel. 853-8440, Vermilion)

Confined Space Entry This workshop teaches candidates to work safely in a hazardous environment. This training can be delivered at various sites as the practical training is conducted on a truck designed for this program.

6. Northern and Southern Alberta Institutes of Technology

(Tel. NAIT: 471-7584, Edmonton
SAIT: 284-7134, Calgary)

The Northern Alberta Institute of Technology (NAIT) and the Southern Alberta Institute of Technology (SAIT) offer hazardous materials management courses.

Hazardous Waste Regulations for the Trainer A three-day course that is designed to provide an in-depth knowledge of the different legislation concerning hazardous waste.

Hazardous Waste and the Workplace This course is a four-hour program to instruct the personnel responsible for handling waste at the worksite.

WHMIS Course for the Trainer This five-day course provides an in-depth knowledge to the trainer about the legislation for the Workplace Hazardous Materials Information System (WHMIS).

The Practical Application of WHMIS at the Worksite A 12-hour course, it describes the responsibilities of employers and employees under the legislation for the Workplace Hazardous Materials Information System.

The Transportation of Dangerous Goods Instructors Certification Course This five-day-course provides trainers with in-depth knowledge of the provincial Transportation of Dangerous Goods Control Act.

7. Seminars and Conferences

Haztech Canada Conference This annual two-day conference is an informational and educational event on the subject of environmental control and hazardous material management. The conference is organized into six sessions. Sessions at the 1990 conference covered emergency response, treatment and disposal, transportation of dangerous goods, recycling and minimizing waste, biomedical waste, and environmental studies and mega projects. (Tel. 466-6622, Edmonton)

Technical Seminar on Chemical Spills This two-day seminar covers some of the latest technical information dealing with chemical spills and disposal. The seminar is divided into sessions discussing the effects and behavior of spilled chemicals in the environment, response and countermeasure technologies for spills, and spill problems. (Tel. (613) 998-9622, Ottawa)

Emergency Response '91 This international conference, which runs from May 28-30 in Calgary, is being organized by MIACC and will be on the theme of Technological Response to Dangerous Substances Accidents. For more information, contact: Major Industrial Accidents Co-ordinating Committee. (Tel. (613) 990-1133, Ottawa)

Make a note . . .

1st World Congress on Stress, Trauma and Coping in the Emergency Service Professions

April 10-14, 1991. Sponsored by the American Critical Incident Stress Foundation (ACISF), the congress will be held in Baltimore, Maryland. For further information, contact: Jeffrey Mitchell or Deborah Orandle, ACISF, P.O. Box 204, Ellicott City, Md. 21043, telephone (301) 750-0856.

National Conference on Disaster Management 1991

April 16-19, 1991. The Regional Municipality of Hamilton-Wentworth will present its second comprehensive conference on Disaster Management at the Hamilton Civic Centre, including presentations on the Hagersville tire fire, the San Francisco earthquake and other disasters. For further information, contact: Gary Ostofy, NCDM 91, Regional Municipality of Hamilton-Wentworth, 119 King Street West, P.O. Box 2911, Hamilton, Ontario L8V 3V9, telephone (416) 546-3911.

Industrial and Hazardous Waste Management

May 5-11, 1991. This seminar, to be held at the Banff Centre for Management, will provide a practical approach to "real-world" problems. Waste management principles will be emphasized rather than details of treatment technology. Managers, regulators, investors and educators with an interest in achieving sound hazardous waste management can benefit from attending. For further information, contact: Patrick Jackman, Program Coordinator, Resource Management, The Banff Centre for Management, Box 1020, Banff, Alberta T0L 0C0, telephone (403) 762-6135 or fax (403) 762-6422.

Emergency Response '91

May 28-30, 1991. This international conference, which is being organized by the Major Industrial Accidents Co-ordinating Committee (MIACC), will be on the theme of Technological Response to Dangerous Substances Accidents. Being held at the Westin Hotel in Calgary, Alberta, the conference will focus on the integration of technology, people and equipment into an effective system that addresses, in an environmentally sound manner, prevention, preparedness and response to accidents involving dangerous substances. For more information, contact: Major Industrial Accidents Co-ordinating Committee, P.O. Box 2526, Station D, Ottawa, Ontario K1P 5W7, telephone (613) 990-1133 or fax (613) 954-4915.

3rd Annual Conference, Canadian Dam Safety Association

September 16-19, 1991. The conference will be held in Vancouver, British Columbia, and is on the theme of natural hazard risk reduction as it applies to dam safety. For further information, contact: Dave Cattanach, B.C. Hydro, 970 Burrard Street, Vancouver, British Columbia V6Z 1Y3, telephone (604) 663-3126 or fax (604) 663-1887.

MAY FU

Last year's annual exercise of the Strathcona District Mutual Aid Program (SD MAP) united government and industry in a co-operative effort to test emergency plans.

Industrial Crisis Management: Aids to Emergency Response Planning

Compiled by Teresa Richey,
APSS Librarian

To borrow material listed, send an interlibrary loan request form to Alberta Public Safety Services Library, 10320 - 146 Street, Edmonton, Alberta, Canada T5N 3A2. Materials located in the Co-ordination and Information Centre, at our Training School, the Government Emergency Operations Centre or our Reference Collection cannot be borrowed but can be referred to in the library.

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New video

The Alberta Public Services Training School and ICU Productions Ltd. have recently jointly produced a training video, *Lifting Devices in a Disaster.* The 11-minute video defines the types of lifting devices which may be available to rescuers at a disaster site.

The greatest benefit of this video is that it spurs the imagination and creativity of rescuers to employ a variety of locally available resources. By doing so, rescuers can likely reduce response time and consequently increase the chances of a successful rescue.

Lifting Devices in a Disaster is available for $49.95, plus $3.50 for G.S.T., from: ICU Video Productions Ltd. 7616 - 106A Avenue Edmonton, Alberta T6A 1K6, telephone (403) 469-2246.

Product Profile

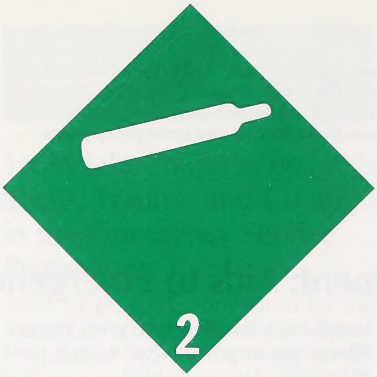
Dichlorodifluoromethane

Dichlorodifluoromethane, more commonly known as R12 and one of the family of gases often called by its collective name of freon, is very much on the minds of many in these days of global changes in the environment and a growing public awareness of pollution. Identified as one of the products responsible for the shrinking of the ozone layer, moves are already being made to reduce the use of this commodity.

This colorless and usually odorless gas is usually shipped as a liquid under pressure. Its major use is that of a refrigerant, hence its common name R (Refrigerant)12, but it is also used as an aerosol propellant, a low-temperature solvent, a leak-detecting agent, and a foaming agent in the manufacture of plastics. Such versatility has given the product many uses in the background to our daily lives.

Dichlorodifluoromethane has a boiling point of -29.2 to -29.8 C (-20.6 to -21.6F) so that it boils under most normal ambient temperature conditions, evolving large amounts of vapor or gas that are heavier than air. These vapors can settle in pits, hollows and depressions, displacing the air and presenting the danger of asphyxiation for anyone entering them unprotected.

Contact with the liquid or concentrated vapors may cause frostbite. The vapors are relatively non-toxic but may act as a narcotic and central nervous system depressant, causing dizziness, difficulty in breathing, disorientation, nausea and possible cardiac arrest. Any small spill outdoors would not likely generate hazardous concentrations, and would only require monitoring to ensure the product has evaporated and dissipated.



Required Label

In the case of a larger release, areas directly around the spill and immediately downwind should be restricted to equipped emergency responders only. Sewers and waterways should be protected from runoff and any personnel downwind should use equipment that cannot be corroded or otherwise damaged by the spilled product. Compatible materials (rubber, neoprene) are needed to protect responding personnel from direct contact with cold liquid, as well as self-contained breathing apparatus with full facepiece to avoid vapors.

The product is usually stable in normal transportation. It does not react with and is practically insoluble in water, but it will dissolve in most organic solvents, alcohol and ether. Dichlorodifluoromethane does not support combustion, but if it is involved in a fire it may decompose into toxic phosgene, fluorides, halogen acids, hydrogen chloride and carbonyl halides. Dichlorodifluoromethane does react with many products such as hot aluminum, mineral acids, strong oxidizing or reducing agents, peroxides, caustics, mercaptans, and hydrazines.

Dichlorodifluoromethane is not corrosive but may act as a catalyst and aid decomposition of metals at high temperatures. It is usually stored or shipped in steel, aluminum, noncorrosive cast iron, lead, brass, copper and tin containers. Pressurized containers in which the product is normally shipped may rupture violently in a fire.

First Aid Information

- Frostbite may result from direct physical contact with the refrigerated, liquified gas. Medical aid must be sought immediately for anyone suffering from this.
- Exposed eyes and skin should be flushed with large amounts of water. If the irritation persists, medical attention should be obtained as soon as possible.
- Any victims of inhalation should be removed to fresh air and kept warm and at rest. Caution must be observed when administering mouth-to-mouth resuscitation as it may expose the responder to chemical from victims' lungs.

For transportation by road, dichlorodifluoromethane is shipped as a Class 2.2 (Non-Flammable Gas) and uses the green Class 2 placard or label. Product identification number is UN 1028. There are no Special Provisions for this product.

Staff Matters

Lloyd Blower has transferred to the position of Dangerous Goods Inspector in the Edmonton District Office of Alberta Public Safety Services (APSS) after six years as a Co-ordination and Information Officer.

Pierre LeFort and **Stephen Tsang** have been appointed as Co-ordination and Information Officers at APSS Headquarters. Pierre has a bachelor's degree in chemistry and five years' experience in an analytical chemical lab and manufacturing; Stephen holds bachelors' degrees in chemistry and food science and has worked as a medical lab technician at the Royal Alexandra Hospital.

Neil McCulloch is leaving his position as Senior Co-ordination and Information Officer at APSS after six years for Montreal, where he will be the new manager of dangerous goods for the International Air Transport Association.

Edmonton District Officer **Paul Riopel**, formerly a District Officer with the St. Paul District Office, has left APSS after nine years to start his own business as an emergency response consultant.

MOUNT ROYAL COLLEGE

EMERGENCY DISASTER RESPONSE

On average, every Alberta municipality will have a serious natural or man-made disaster every 15 years. Do you have to deal with an emergency in your business operation or plant? How would you respond to a media inquiry about a potentially hazardous situation in the work place? In this one-day seminar, co-sponsored by Alberta Public Safety Services, you will learn about relevant government regulations, local emergency plans, the operation of emergency response organizations and methods of dealing with the media in emergency situations.

Dates: Thursday
April 18th, 1991
9 a.m. - 4 p.m.

Instructors: Alberta Public Safety Services
Calgary Disaster Response

Location: City Centre Campus
833 - 4th Avenue S.W.
Calgary

Fee: $195

For course information only call 240-6929

CANCELLATION POLICY: Mount Royal College reserves the right to cancel any course or workshop which does not achieve the required minimum enrolment. All students will be notified of the cancellation and receive a full registration refund or they will have the option of transferring to another course space permitting. Please allow 30 days for processing.

WITHDRAWAL/REFUND POLICY: Verbal notice of withdrawal must be received by the Continuing Education Registration Office four (4) full working days prior to the commencement of the course or seminar (not including Saturday or Sunday) to be eligible for a full refund less a $20 administrative charge unless stated otherwise. Written notification, accompanied by the original registration confirmation form must be received by the Continuing Education Credit-Free Registration office prior to the fee reimbursement. If you are unable to attend the seminar, you may arrange for someone to take your place after consulting with the Registration Office. Withdrawals not made four (4) full working days prior to the course are liable for the entire fee.

REGISTRATION
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Friday 8:30 a.m. - 4 p.m.

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Telephone: ______________________________ Date of Birth: ______________
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Course Title: ______________________________ Section (if applicable): __________ Fee __________

Have you attended continuing education at Mount Royal College before? ☐ Yes ☐ No

Fee in full payable to **Mount Royal College - Continuing Education** must accompany registration:

☐ Cheque ☐ Money Order ☐ Visa ☐ MasterCard

Card Number: ______________________________ Expiry Date: ______________

Signature of Cardholder: ______________________________

Mail to: Mount Royal College, Continuing Education Credit-Free Registration Office.
1825 Richard Road S.W., Calgary, Alberta T3F 6K6

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Permit No. 4212

New regulations for dangerous goods packaging

New amendments to the federal Transportation of Dangerous Goods (TDG) Regulations mark the first stage in the introduction of national regulations for bulk and non-bulk dangerous goods packaging in Canada.

The changes for non-bulk packaging are included in Amendment Schedule No. "14", published on December 1, 1990 by Transport Canada in *Canada Gazette, Part I,* for public comment. Transport Canada expects these proposed amendments will become effective early in 1991.

Amendment Schedule "14" addresses requirements for the non-bulk packaging and handling of dangerous goods by road, rail and domestic marine transport and will revise Part VII of the Transportation of Dangerous Goods Regulations: "Safety Requirements for the Handling or Offering for Transport of Dangerous Goods". Certain sections of Parts I and II and Schedule III to the Regulations will be amended as a result of the changes to Part VII. In addition, miscellaneous amendments to Part V (safety marks) are proposed.

These amendment proposals first appeared in the *Transportation of Dangerous Goods Newsletter* "Special Bulletin" published in March 1988. Some modifications have been made as a result of comments received from interested companies, organizations and individuals. The proposed regulations make reference to a series of published standards containing detailed packaging requirements. These standards, which form the central part of the TDG's packaging regulations, include two types: standards for selecting packaging and standards for the manufacture of packaging.

The non-bulk manufacturing standards appeared in a proposed amendment to Part VI of the Regulations (Amendment Schedule Number 9) in August 1987. This amendment to Part VII introduces the non-bulk standards for selecting packaging (packaging users). A list of all the transport packaging standards for dangerous goods is included in the latest Transport Canada Amendment Notice as is the extract from the *Canada Gazette Part I* containing the complete text of the proposed amendments and Regulatory Impact Analysis Statement.

For more information, phone the Alberta Public Safety Services Co-ordination and Information Centre toll-free in Alberta at 1-800-272-9600 or 403-422-9600, 24 hours a day.